

PATENT ABSTRACTS OF JAPAN

C4

(11) Publication number : 05-190890
(43) Date of publication of application : 30.07.1993

(51) Int. Cl. H01L 31/12

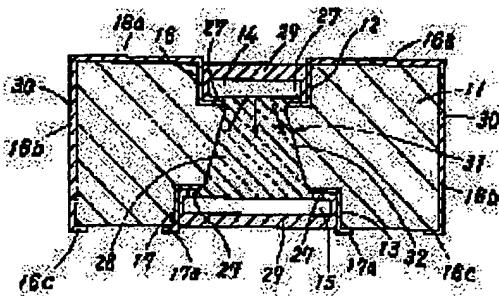
(21) Application number : 04-005428 (71) Applicant : SHARP CORP
(22) Date of filing : 16.01.1992 (72) Inventor : IWASAKI MASARU

(54) OPTICALLY COUPLED DEVICE

(57) Abstract:

PURPOSE: To reduce thickness and generation of failure due to release and crack of a mold resin by forming a through hole between recessed parts which are provided on both front and rear surfaces of a heat-resistant insulating resin substrate, then providing a solid plated electrode part on the heat-resistant insulating resin substrate, mounting a light-emitting element and a photodetector on it and molding the recessed parts with resin.

CONSTITUTION: A plurality of heat-resistant insulating resin substrates 11 are subjected to injected molding in one piece as one large substrate and at the same time recessed parts 12 and 13 and a through hole 31 are formed. Then, solid plating is performed selectively on the recessed parts 12 and 13 and the front and rear surfaces of the heat-resistant insulation resin substrate 11, thus forming electrode parts 16 and 17. Also, the electrode parts 16 and 17 of the resin are bonded by a connection means 27 of a light-emitting diode 15. Then, for protecting these, a liquid translucent resin 28 is applied to the element 14 and the photodetector 13 through hole 31 before curing and further a glass 29 is applied to the upper-layer part, thus screening a disturbance. The heat-resistant insulation resin substrate 11 is of a parallelepiped shape.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application]

other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C) ; 1998, 2000 Japan Patent Office